

ENVIRONMENTAL SERVICES DEPARTMENT (ESD) AWARENESS, USAGE, CUSTOMER SATISFACTION AND PREFERENCES STUDY

(Conducted March, 2011)

Prepared for:

ENVIRONMENTAL SERVICES DEPARTMENT (ESD)
City of Tucson

Tucson, Arizona

Prepared by:

FMR ASSOCIATES, INC.

Tucson, Arizona

Copyright, FMR Associates, Inc., 2011

ENVIRONMENTAL SERVICES DEPARTMENT (ESD) AWARENESS, USAGE, CUSTOMER SATISFACTION AND PREFERENCES STUDY

(March, 2011)

Digest of the Contents

<u>Introd</u>	uction and G	<u>oals</u> I-1
Execu	tive Summar	<u>y</u> I-3
<u>Detail</u>	s of the Find	<u>ings</u>
I.	Overall ES	D Evaluations 1
	Table 1.	Overall Rating of Tucson's Environmental Services Department
	Table 2.	Rating of Various ESD Services and Programs
II.	Brush & B	ulky Program Evaluations4
	Table 3.	Brush & Bulky Scheduled Service Usage
	Table 3a.	Number of Times Per Year Brush & Bulky Service Used (Among Those Who Have Used the Service)
	Table 3b.	Rating of the Brush & Bulky Service (Among Those Who Have Used the Service)
	Table 3c.	Location of Brush & Bulky Pick-Up (Among Those Who Have Used the Service)
	Table 3d.	Preference for Curb Pick-Up (Among Those Who Have Alley Brush & Bulky Pick-Up)
	Table 3e.	Reasons for Not Preferring Brush & Bulky Curb Pick-Up (Among Those Who Would Not Prefer Curb Pick-Up)
	Table 4.	Reasons for Not Using Brush & Bulky Pick-Up Service (Among Those Who Do Not Use the Service)
	Table 5.	Awareness of Fee-Based Special Brush & Bulky Pick-Up
	Table 5a.	Usage of Fee-Based Special Brush & Bulky Pick-Up (Among Those Familiar With the Service)
	Table 5b.	Overall Rating of Fee-Based Special Brush & Bulky Pick-Up Service (Among Those Who Have Used the Service)
	Table 5c.	Good Value for the Cost of Fee-Based Special Brush & Bulky Pick-Up (Among Those Who Have Used the Service)
	Table 6.	Possible Future Use of Fee-Based Special Brush & Bulky Pick-Up (Among Those Who Are Unaware of the Service)
	Table 6a.	Use of Another Service Like the Fee-Based Special Brush & Bulky Pick-Up (Among Those Who Are Unaware of the Service)
	Table 6b.	Other Pick-Up Service Used (Among Those Who Have Used a Service Similar to the Fee-Based Special Brush & Bulky Pick-Up)

ENVIRONMENTAL SERVICES DEPARTMENT (ESD) AWARENESS, USAGE, CUSTOMER SATISFACTION AND PREFERENCES STUDY

(March, 2011)

Digest	of the	Contents	(Cont'	d)
--------	--------	-----------------	--------	----

	Table 7.	Willingness to Pay Various Amounts for a One-Time Special
		Brush & Bulky Pick-Up (Among Those Aware of the Special
	Toble 9	Service or Those Unaware Who Indicate Potential Usage) William and to Separate Proch & Pulky Pick Un Service Track
	Table 8.	Willingness to Separate Brush & Bulky Pick-Up Service Trash
		Materials Into Separate Piles (Among Those Aware of the
	Table 0	Service or Those Unaware Who Indicate Potential Usage)
	Table 9.	Consideration of Elimination of Regular Brush & Bulky Service and
		Fees and Having As-Needed Fee-Based Pick-Up Only (Among
	Table 10	Past-Users or Those Unfamiliar With the Brush & Bulky Service)
	<u>Table 10.</u>	Sufficiency of Door Hanger Notification of Brush & Bulky Service
	Table 10a.	Suggested Notification Methods in Place Of or In Addition to Door Hangers (Among Those Who Think Door Hangers Are Insufficient)
	<u>Table 11</u> .	Consideration of Separate Barrel for Landscape or Yard Waste
		Collection for Additional Monthly Fee
	Table 11a.	Willingness to Pay Various Amounts Per Month for Separate
		Landscape/Yard Waste Barrel Collection (Among Those
		Willing to Consider a Separate Barrel)
III.	Household	Hazardous Waste Program Evaluations
	<u>Table 12</u> .	Awareness of Household Hazardous Waste Program
	Table 12a.	Locations Used to Drop Off Household Hazardous Waste
		(Among Those Aware of the Program)
	<u>Table 13</u> .	Willingness to Pay Various Amounts for a Scheduled Pick-Up
		of Household Hazardous Waste
IV.		nunication and Website Evaluations
	<u>Table 14</u> .	Communication Resources Used for Information About Environmental Services
	Table 15.	Best Way to Provide Information About Environmental Services
	Table 16.	Use of Environmental Services Website
	Table 16a.	Reasons for Using Environmental Services Website
		(Among Those Who Have Used the Website)
	<u>Table 17</u> .	Potential Sign-Up for Environmental Services Informational E-Mails
V.	Temporary	Service Stop Evaluations 34
	<u>Table 18</u> .	Potential Use of Temporary Service Stop Program
	<u>Table 18a</u> .	Willingness to Use Temporary Service Stop Program at Various
		Fee Levels (Among Those Willing to Consider the Service)
VI.	Suggestion	s for ESD
	Table 19.	Additional Suggestions, Recommendation or Comments for ESD

	L SERVICES DEPARTMENT (ESD) AWARENESS, USAGE, SFACTION AND PREFERENCES STUDY
Digest of the Content	s (Cont'd)
Appendix	
Survey Methodology	and Sample Selection
Respondent Character	<u>istics</u>
<u>Table A-1</u> .	
Table A-2.	Ownership/Rental of Current Home
Table A-3.	Type of Home
Table A-4.	Household Income of Respondents
Table A-5.	Gender of Respondents
<u>Table A-6</u> .	Age of Respondents
Table A-7.	Language of Survey
Statistical Reliability	
Confidence Intervals	

Significance of Difference Between %

Copy of Survey Instrument

ENVIRONMENTAL SERVICES DEPARTMENT (ESD) AWARENESS, USAGE, CUSTOMER SATISFACTION AND PREFERENCES STUDY

(March, 2011)

Introduction and Goals

This Awareness, Usage, Customer Satisfaction and Preferences Study, conducted for the City of Tucson's Environmental Services Department (ESD), was designed to assess residential customer awareness, usage and satisfaction with ESD services. Kaneen Advertising & Public Relations, Inc. assisted in the planning and preparation of the survey. Where possible and relevant, comparisons are made between this study and the Residential Customer Survey conducted for ESD by Marketing Intelligence in October 2008.

Areas of Investigation – The following areas of investigation were considered the central points for this Awareness, Usage, Customer Satisfaction and Preferences Study:

- 1. **Overall ESD Evaluations** What is the overall rating of ESD, as well as key programs and services? What suggestions or comments do residential customers offer concerning ESD?
- 2. **Brush & Bulky Program Evaluations** What is the awareness, usage and rating of regular and fee-based special Brush & Bulky program users think the service is a good value? How much are residential customers willing to pay for one-time fee-based special program services? Are Brush & Bulky program users willing to separate pick-up materials into piles? Are users willing to consider dropping regular Brush & Bulky services/fees and go to as-needed pick-up only? Would residential customers consider a separate barrel for landscape or yard waste collection? If so, how much are they willing to pay each month? Are door hangers sufficient to notify residential customers of regular Brush & Bulky pick-up service? If not, what is suggested to enhance or replace them?
- 3. **Household Hazardous Waste Program Evaluations** What is the awareness of the Household Hazardous Waste Program? Among users, which drop-off sites have been utilized? What is the willingness to pay for scheduled pick-up of household hazardous waste?
- 4. **ESD Customer Communication Evaluations** What communication sources do residential customers use to get information about ESD services? What do customers say is the best way to communicate with them? Do residential customers use the ESD website? If so, what do they use the website for? Are residential customers willing to sign up for information e-mails from ESD?



5. **Temporary Service Stop Program Evaluations** – Are residential ESD customers interested in a temporary service stop program while they are away from home for an extended period of time? If so, how much are they willing to pay for such a service?

Methodology Overview – To accomplish the goals of this study, a random sampling of ESD residential customers (heads of household age 18 or older) was interviewed by telephone during early March 2011. All customers were contacted from an ESD-supplied database. Surveys were conducted in English or Spanish, as preferred by the respondent. The specific procedures used to select the sample, as well as the descriptions of the demographic composition of the survey respondents, are explained in detail in the Appendix of this report.



ENVIRONMENTAL SERVICES DEPARTMENT (ESD) AWARENESS, USAGE, CUSTOMER SATISFACTION AND PREFERENCES STUDY

(March, 2011)

Executive Summary

The Survey Sample – This statistically-projectable survey includes 408 telephone interviews conducted among a random sampling of City of Tucson Environmental Services Department (ESD) residential service customers (heads of household age 18 or older) contacted from a client-supplied database. Surveys were equally distributed among the City's six Wards. A Spanish-language version of the final survey instrument was prepared and made available to respondents who requested it.

Survey Tracking – Where possible and relevant, comparisons are made between this report and the Residential Customer Survey conducted for ESD by Marketing Intelligence in October 2008. The screening criteria, Ward distribution and sample size for the 2008 survey are similar to the 2011 study. However, in terms of survey length, the 2011 survey (at 12 minutes) was much shorter than the 2008 project (19 minutes).

Customer Profile – The vast majority of customers surveyed in 2011 own their home (88% versus 12% who rent) and live in a single-family residence (91%). The majority (53%) have lived in their current residence for 11+ years, with the balance nearly equally divided between 0-to-3 (22%) and 4-to-10 (24%) year residents.

The final in-tab screened sample drawn from the client-supplied database skews female (60%), with the following age distributions: 15%, 18 to 34; 12%, 35 to 44; 22%, 45 to 54; 21%, 55 to 64; and 29%, 65 or older. Annual household income distributions are as follows: 16%, under \$25,000; 15%, \$25,000 to \$34,999; 17%, \$35,000 to \$49,999; 19%, \$50,000 to \$74,999; 11%, \$75,000 to \$99,999; and 22%, \$100,000 or more. Overall, 11% refused to divulge their household income category. Median annual household income (excluding refusals) is \$52,673.

How does this profile compare to the 2008 survey? Both survey samples skew female, with slightly more 45 to 54 year-olds in the current study (22% versus 18% in 2008). The 2011 sample has a higher percentage of long-term (11+ year) residents at current address (53% versus 42% in 2008). Annual household income is also somewhat greater (\$52,673 compared to \$44,270 in 2008).

Overall Rating of ESD – More than eight of ten residential customers (83%) think that the ESD does an "excellent" (43%) or "good" (40%) job overall. Most of the rest indicate a "fair" rating (12%), while just 5% are negative to any degree – yielding a 4.2 average score on the "1-to-5" scale.



How do these results compare to the 2008 survey? While the 2008 sampling frame included only those familiar with the ESD (versus all customers in the current survey), there has been marked improvement. Specifically, the percentage of "excellent job" evaluations has doubled from 22% to 43%, while "good job" ratings have increased from 30% to 40% and negative evaluations have declined from 13% to just 5% now. As a result, the average rating on the "1-to-5" scale has increased from 3.6 in 2008 to 4.2 now.

Rating of Individual ESD Services and Programs – One-half or more indicate "excellent" evaluations of these ESD services/programs:

- Recyclables collection in the blue barrel (55% "excellent job," 30% "good" [85% positive evaluation overall] versus 4% negative to any degree [4.3 average score on the "1-to-5" scale consistent with the 4.4 evaluation in 2008].)
- **Trash collection** (52% "excellent job," 34% "good" [86% positive evaluation overall] versus 3% negative to any degree [4.3 average score unchanged since the 2008 study].)
- **Brush & Bulky collection** (49% "excellent job," 29% "good" [78% positive evaluation overall] versus 6% negative to any degree [4.2 average score very consistent with the 4.3 evaluation in 2008]. Even two-thirds of non-users or those unfamiliar with the Brush & Bulky collection offer a positive evaluation of the program [3.9 compared to a 4.2 among current users].)

Among the 55% with an opinion, seven of ten customers indicate a positive evaluation of **providing customer service on the telephone** – including 42% who think that ESD does an "excellent job." This compares to 12% who offer a "poor" rating (3.9 average score).

Most have no opinion with respect to the **Household Hazardous Waste Program** (57%). Among those who do, six of ten indicate a positive evaluation – including 35% who say that ESD does an "excellent job." Meanwhile, 16% are negative (3.7 average score – down somewhat from 4.1 in 2008).

Brush & Bulky Program Evaluations – Three of four residential customers indicate that they use Brush & Bulky's twice-a-year scheduled service (compared to 80% who indicated at least occasional usage in the 2008 survey).

Among the rest, 23% indicate that they are non-users of the regular Brush & Bulky pick-up service. These tend to be renters (33%) and customers who reside in something other than a single-family home (such as a duplex, townhome, etc.) (51%). Why not? Among current Brush & Bulky non-users, the largest share indicate they "haven't needed it" or "don't have anything to put out." Some add that they "have a landscaper and he takes all of that stuff away" and/or say "we take our Brush & Bulky to the dump." A few new



residents at their current address indicate they "just moved to Tucson" or "have not lived at residence for long."

Among residential customers who utilize the program (74% of the total sample), three of four report that they use the Brush & Bulky service twice per year. Most of the rest use the service once each year (18%), more often renters and those who live in something other than a single-family residence.

Seven of ten service users indicate that their Brush & Bulky pick-up occurs at the curb (70%). This is particularly true among renters (82% versus 68% of homeowners) and users who live in something other than a single-family home (79% versus 69% single-family home residents). Another 28% report that their Brush & Bulky service pick-up takes place in the alley. These tend to be older (55+) users.

Among the 28% of Brush & Bulky service users who currently have pick-up service in the alley, only one of ten they would prefer curbside service (2%) or say it makes no difference (7%). Instead, fully nine of ten alley patrons wish to maintain their Brush & Bulky pick-up service in the alley. Why? Brush & Bulky customers with alley pick-up who do not prefer curbside pick-up service most often say they "don't want the stuff in front of the house." Others add that "on the curb it looks messier" and/or say that the alley is "out of sight" or "out of the way." A few specifically say prefer alley service because "that's the purpose of an alley." Several also mention that it is "convenient" or "easier" for them to have alley pick-up — with "less hauling" and/or allowing for accumulation of Brush & Bulky materials.

Brush & Bulky Service Rating – Users of the Brush & Bulky program are very positive about their service. More than six of ten believe that Brush & Bulky does an "excellent job" (62%), and another one of four rate it as "good." This compares to only 3% who are negative to any degree, resulting in a 4.4 average score on the "1-to-5" scale. "Excellent" evaluations are consistent regardless of home ownership, type of home and length of residence at current address.

Sufficiency of Door Hanger Notification – Fully 93% of residential customers indicate that the current door hanger notification of Brush & Bulky pick-up service is sufficient. Only 5% say that it is not. What do these customers recommend to replace or enhance the door hangers? Most suggest mail or an insert with a regular monthly bill. Others recommend notification by e-mail or the Internet.

Special Brush & Bulky Pick-Up Evaluations – More than one-third (36%) of residential customers indicate that they are aware that they can call ESD at any time to schedule a special Brush & Bulky pick-up for an additional fee. As might be expected, three of four current non-users of regular Brush & Bulky users are unaware of the special pick-up service (62% overall).



Among the 36% of residential customers aware of the special Brush & Bulky pick-up, 12% indicate that they have used the service. These are nearly exclusively homeowners who have lived at their current address for 11+ years. How do past-users rate the special Brush & Bulky pick-up service? Three of four past-users rate it as "excellent" and none indicate a negative evaluation, resulting in a 4.6 average score on the "1-to-5" scale. Consistent with these high service quality ratings, nearly all (16 of 17 or 94%) past-users also indicate that the service was a good value for the cost.

Possible Future Use of Special Brush & Bulky Pick-Up — Among residential customers unaware of the special Brush & Bulky pick-up service (64% of total customers), 43% indicate they might use it in the future. Future potential usage is higher among renters (64% versus 40% of homeowners) and progressively "newer" residents at their current address. Have residents unaware of the special Brush & Bulky pick-up used another service like it? Only 6% say "yes" — typically higher income households (\$75,000+) who have lived at their current address for 11+ years. Which service did they use? Few are able to identify a particular company or service. Instead, most simply say the services were provided by "a landscaper" or "private service."

Special Brush & Bulky Pick-Up Fee Elasticity – How much are residential customers aware of the service (or those unaware who might use it in the future) willing to pay for one-time special Brush & Bulky pick-up service? Based on the detailed findings, it is apparent that the highest degree of willingness to pay is at the \$55 fee level. However, this is an acceptable fee for only 30% of the entire sample. In other words, 70% have no interest in the service or would not be willing to pay a one-time fee of \$55.

Willingness to Separate Brush & Bulky Trash Materials Into Separate Piles – Among residential customers aware of the special Brush & Bulky pick-up service (or unaware of the special service but willing to use it) (82% of the total sample), fully 85% are willing to sort trash materials into three separate landscape waste, tires and "other" piles. This is the case regardless of home ownership status or type of residents.

Consideration of Elimination of Regular Brush & Bulky Service and Replacing With As-Needed Fee-Based Pick-Up Only – Among past-users or those unfamiliar with the regular Brush & Bulky service (77% of the total sample), six of ten would *not* consider eliminating their twice-a-year pick-up Brush & Bulky service (and reducing their monthly Environmental Services fee by \$2) in lieu of only pick-up on an as-needed basis for a fee. Among the rest, 28% are willing to consider going to an as-needed, fee-based Brush & Bulky service. The balance, (14%) are not sure.

Consideration of Separate Barrel for Landscape/Yard Waste Collection – One of four residential customers would consider a separate barrel for landscape or yard waste collection for an additional monthly fee. Another 13% are unsure or say "it depends." Those willing to consider a separate landscaping/yard waste barrel include renters and



progressively younger customers. Overall, six of ten are unwilling to consider a separate landscaping/yard waste barrel.

Separate Landscape/Yard Waste Barrel Collection Monthly Fee Elasticity – Among those willing to consider a separate landscape/yard waste barrel (or say it depends) (39% of the total sample), a majority (52%) would accept a \$10/month fee. And two-thirds of those who would consider a separate barrel would be willing to pay \$7.50 a month.

Household Hazardous Waste Program Awareness and Usage – Six of ten residential customers indicate that they are aware of the Household Hazardous Waste Program (61%). Users of the regular Brush & Bulky service are also more apt to be aware of the Household Hazardous Waste Program. Among those familiar with the program, one of four have dropped off items at a monthly collection event (26%), while two of ten have dropped off household hazardous waste at either the Sweetwater Facility (22%) or Los Reales Landfill (21%).

Household Hazardous Waste Scheduled Pick-Up Fee Elasticity of Support – Among residential customers, 51% are willing to pay a \$10 fee for a scheduled pick-up of household hazardous waste at their home by the ESD.

ESD Communication Recall and Preferences – Door hangers (82%) and water bill/utility statement inserts (67%) are the two most recalled ESD communication media among residential customers. In lesser numbers, some residential customers mention seeing ESD information in newspapers (33%), on television (25%) or in brochures or pamphlets (25%).

According to customers, what is the *best* way to provide information about ESD? Door hangers (38%) and inserts in the monthly water bill or utilities statement (34%) are preferred nearly equally. Fewer prefer websites (8%), newspapers (6%) or television (4%).

ESD Website Usage – Among the total sample, one of four indicate that they have used the Environmental Services website. Usage is higher among customers under the age of 55 and those with household incomes between \$50,000 and \$99,999.

Why do these users utilize the ESD website?

- ✓ Find dates for Brush & Bulky pick-up or trash collection (74%)
- ✓ Order containers (26%)
- ✓ Fill out service requests (22%)

Potential Sign-Up for ESD Informational E-Mails – Nearly four of ten residential customers (38%) indicate that they would sign up for a service if Environmental Services offered a way to receive information via e-mail.



Use of Temporary Service Stop Program – Residential customers were asked if they would consider using a program "offering existing customers a way to temporarily halt and then resume their service while away from home for a long period of time" with a restart fee to redeliver the barrels upon their return. Two of ten indicate they would consider such a service (21%). Another 12% say "it depends."

Temporary Service Stop Program Fee Elasticity – The detailed findings suggest a fee of \$25 for a temporary service stop program among customers willing to consider the service (33% of the total sample).

Additional Suggestions/Recommendations or Comments for ESD – Six of ten residential customers offer no suggestions (51%) or indicate they are "very pleased with the service" they currently receive from ESD (9%). The remaining four of ten offer a variety of suggestions. Some want the ESD to "get people more informed about recycling" and "to increase recycling, be able to recycle more items." Others "want to know more about hazardous waste." A few also request more Brush & Bulky pick-ups or "would like them to take on the debris in the washes."

In terms of specific complaints, some say that "when the drivers place the cans back, put the lids back on because they fall over and we have to go out and pick them up" or mention that "sometimes they leave trash on the ground and I have to pick it up." Others think "they're overcharging us for things we used to get and are supposedly being paid for by our taxes."



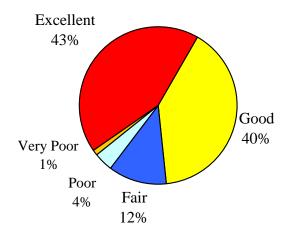
DETAILS OF THE FINDINGS

Overall ESD Evaluations

Overall Rating of Tucson's Environmental Services Department – More than eight of ten residential customers (83%) think that the City's Environmental Services Department (ESD) does an "excellent" (43%) or "good" (40%) job overall. Most of the rest indicate a "fair" rating (12%), while just 5% are negative to any degree – yielding a 4.2 average score on the "1-to-5" scale. Importantly, positive evaluations are consistent regardless of Brush & Bulky program usage or demographic sub-group. Women, those 55 or older and households with annual household incomes below \$50,000 are most apt to think that ESD does an "excellent job" overall (a "5" on the "1-to-5" scale). The few customers who indicate a "fair" or "poor" rating tend to be men and 35 to 44 year-olds (although the overwhelming majority are positive in their evaluations).

How do these results compare to the 2008 survey? While the sampling frame included only those familiar with the Environmental Services Department (versus all customers in the current survey), there has been marked improvement. Specifically, the percentage of "excellent job" evaluations has doubled from 22% to 43%, while "good job" ratings have increased from 30% to 40% and negative evaluations have declined from 13% to just 5% now. As a result, the average rating on the "1-to-5" scale has increased from 3.6 in 2008 to 4.2 now.

Table 1 Overall Rating of Tucson's Environmental Services Department (Avg=4.2)





Rating of Various ESD Services and Programs – When asked to rate individual services or programs offered by ESD, one-half or more indicate "excellent" evaluations of the following:

- Recyclables collection in the blue barrel (55% "excellent job," 30% "good" [85% positive evaluation overall] versus 4% negative to any degree [4.3 average score on the "1-to-5" scale consistent with the 4.4 evaluation in 2008]. Positive evaluations are consistent across-the-board, with the highest "excellent job" ratings among women and the oldest [65+] customers.)
- Trash collection (52% "excellent job," 34% "good" [86% positive evaluation overall] versus 3% negative to any degree [4.3 average score unchanged since the 2008 study]. The newest residents at their current address [for less than three years], women, 35 to 44 year-olds and those with incomes between \$75,000 and \$99,999 offer the most positive evaluations of ESD trash collection.)
- **Brush & Bulky collection** (49% "excellent job," 29% "good" [78% positive evaluation overall] versus 6% negative to any degree [4.2 average score very consistent with the 4.3 evaluation in 2008]. Even two-thirds of non-users or those unfamiliar with the Brush & Bulky collection offer a positive evaluation of the program [3.9 compared to a 4.2 among current users]. The few customers with a negative evaluation tend to be 35 to 54 year-olds.)

Among the 55% with an opinion, seven of ten customers indicate a positive evaluation of **providing customer service on the telephone** – including 42% who think that ESD does an "excellent job." This compares to 12% who offer a "poor" rating (3.9 average score). Older customers (55+) and those in the \$75,000 to \$99,999 income category offer the most positive evaluations. Renters, 35 to 44 year-olds and the newest residents at their current address (for less than three years) are among those more likely to indicate a "poor" rating.

Most have no opinion with respect to the **Household Hazardous Waste Program** (57%). Among those who do, six of ten indicate a positive evaluation – including 35% who say that ESD does an "excellent job." Meanwhile, 16% are negative (3.7 average score – down somewhat from 4.1 in 2008). The youngest customers (18 to 34), 4-to-10 year residents at their current address and households in the \$75,000 to \$99,999 income category offer the most positive evaluations. Customers 45 to 54 and those with incomes between \$25,000 and \$34,999 are more likely to indicate a "poor" opinion of this program.



Table 2 Rating of Various ESD Services and Programs

(N=408)	Excellent	Good	Fair	Poor	Very Poor	Average Score on 1-5 Scale
Recyclables collection in the blue barrel	55%	30%	12%	2%	2%	4.3
Trash collection	52%	34%	11%	2%	1%	4.3
Brush & Bulky collection	49%	29%	16%	4%	2%	4.2
Providing customer service on the telephone	42%	27%	18%	8%	5%	3.9
Household Hazardous Waste Program	35%	26%	23%	11%	5%	3.7

Brush & Bulky Program Evaluations

Brush & Bulky Scheduled Service Usage – Three of four residential customers indicate that they use Brush & Bulky's twice-a-year scheduled service (compared to 80% who indicated at least occasional usage in the 2008 survey). This is particularly true among progressively more long-term residents of their current address – as well as 45 to 64 year-olds and customers in the \$25,000 to \$34,999 household income category.

Overall, 23% indicate that they are non-users of the regular Brush & Bulky pick-up service. These tend to be renters (33%), 18 to 34 year-olds (36%) and higher income households (earning \$100,000 or more) (33%) – as well as customers who reside in something other than a single-family home (such as a duplex, townhome, etc.) (51%).

Only 3% indicate they are not sure or are unfamiliar with the Brush & Bulky scheduled service.

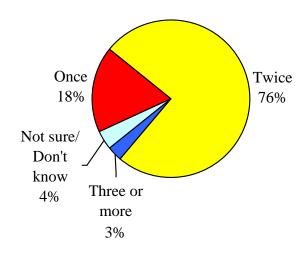
Table 3 Brush & Bulky Scheduled Service Usage





Number of Times Per Year Brush & Bulky Service Used – Among residential customers who utilize the program; three of four reports that they use the Brush & Bulky service twice per year. This includes a similar share of homeowners and single-family home residents. Most of the rest use the service once each year (18%), more often renters and the youngest customers (18 to 34) – as well as those who live in something other than a single-family residence. Few overall indicate they use the Brush & Bulky service three or more times per year (3%).

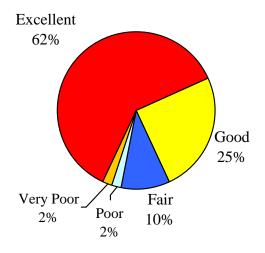
Table 3a Number of Times Per Year Brush & Bulky Service Used
(Among Those Who Have Used the Service)
(N=304)





Rating of the Brush & Bulky Service – Users of the Brush & Bulky program are very positive about their service. More than six of ten believe that Brush & Bulky does an "excellent job" (62%), and another one of four rate it as "good." This compares to only 3% who are negative to any degree, resulting in a 4.4 average score on the "1-to-5" scale. "Excellent" evaluations are consistent regardless of home ownership, type of home and length of residence at current address. Women, the oldest users (65+) and those in the \$25,000 to \$34,999 household income category indicate the most highly positive evaluations of the Brush & Bulky service.

Table 3b Rating of the Brush & Bulky Service
(Among Those Who Have Used the Service)
(N=304)
(Avg=4.4)



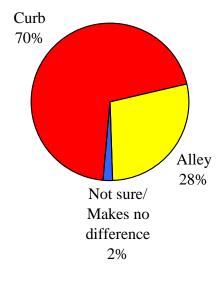


Location of Brush & Bulky Pick-Up – Seven of ten service users indicate that their Brush & Bulky pick-up occurs at the curb (70%). This is particularly true among renters (82% versus 68% of homeowners) and users who live in something other than a single-family home (79% versus 69% single-family home residents). The incidence of curbside pick-up is inversely related to the length of residence at current address. Another 28% report that their Brush & Bulky service pick-up takes place in the alley. These tend to be older (55+) users.

Table 3c Location of Brush & Bulky Pick-Up

(Among Those Who Have Used the Service)

(N=304)



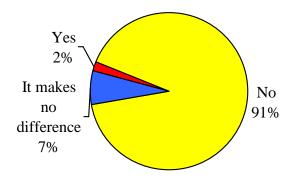


Preference for Curb Pick-Up – Among the 28% of Brush & Bulky service users who currently have pick-up service in the alley, only one of ten they would prefer curbside service (2%) or say it makes no difference (7%). Instead, fully nine of ten alley patrons wish to maintain their Brush & Bulky pick-up service in the alley.

Table 3d Preference for Curb Pick-Up

(Among Those Who Have Alley Brush & Bulky Pick-Up)

(N=86)





Reasons for Not Preferring Brush & Bulky Curb Pick-Up — Brush & Bulky customers with alley pick-up who do not prefer curbside pick-up service most often say they "don't want the stuff in front of the house" ("it looks trashy in the front," "less of an eyesore," "looks better in alley instead of front"). Others add that "on the curb it looks messier" and/or say that the alley is "out of sight" or "out of the way." A few specifically say they prefer alley service because "that's the purpose of an alley." Several also mention that it is "convenient" or "easier" for them to have alley pick-up — with "less hauling" and/or allowing for accumulation of Brush & Bulky materials ("more convenient because it is usually from the backyard," "easier to put in alley," "we can pile it up over time," "I can just gradually put stuff back there," "the curb is like 500 feet away").

Refer to pages V1-V3 in the Appendix for a complete listing of reasons for not preferring Brush & Bulk curb pick-up.

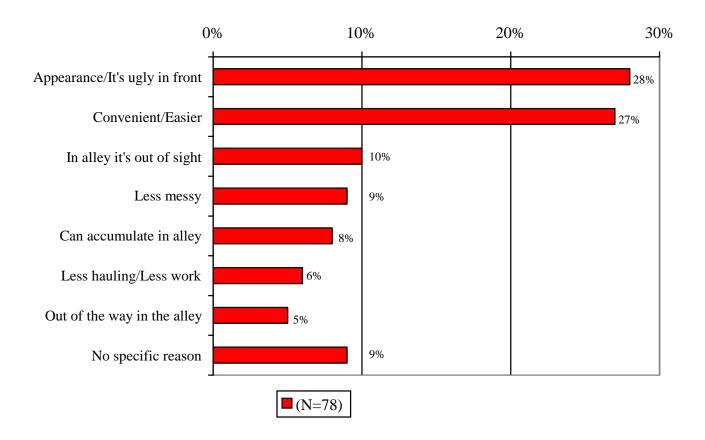
Table 3e

Reasons for Not Preferring

Brush & Bulky Curb Pick-Up

(Among Those With Alley Pick-Up Who

Would Not Prefer Curb Pick-Up)

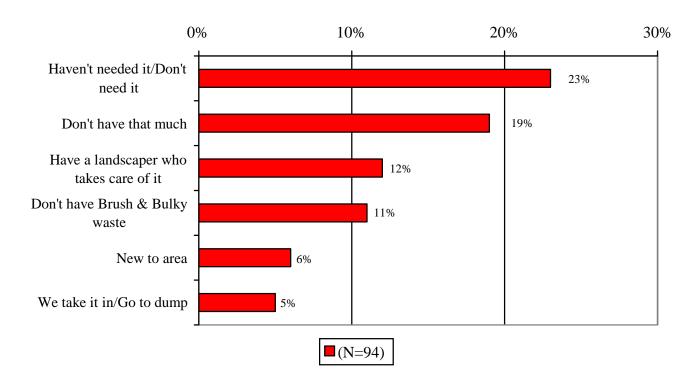




Reasons for Not Using Brush & Bulky Pick-Up Service — Among residential customers who do not use the Brush & Bulky service (23% of the total sample), the largest share indicate they "haven't needed it" or "don't have anything to put out" ("don't have the need," "don't have enough of Brush & Bulky for them to pick up," "nothing to put out there"). Some add that they "have a landscaper and he takes all of that stuff away" and/or say "we take our Brush & Bulky to the dump." A few new residents at their current address indicate they "just moved to Tucson" or "have not lived at residence for long." Just 4% of non-users report that they "did not know about" the Brush & Bulky service.

Turn to pages V4-V6 in the Appendix of this report for a listing of reasons for not using the Brush & Bulky pick-up service.

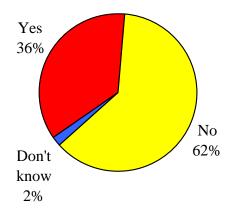
Table 4 Reasons for Not Using Brush & Bulky Pick-Up Service (Among Those Who Do Not Use the Service)





Awareness of Fee-Based Special Brush & Bulky Pick-Up – More than one-third (36%) of residential customers indicate that they are aware that they can call ESD at any time to schedule a special Brush & Bulky pick-up for an additional fee. Progressively older customers and more long-term residents at their current address are more likely to indicate awareness of this special service – with few differences based on home ownership status or type of residence. As might be expected, three of four current non-users of regular Brush & Bulky users are unaware of the special pick-up service (62% overall).

Table 5 Awareness of Fee-Based Special Brush & Bulky Pick-Up

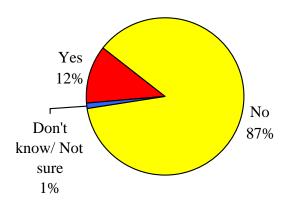




Usage of Fee-Based Special Brush & Bulky Pick-Up – Among the 36% of residential customers aware of the special Brush & Bulky pick-up, 12% indicate that they have used the service. These are nearly exclusively homeowners who have lived at their current address for 11+ years.

Table 5a Usage of Fee-Based Special Brush & Bulky Pick-Up

(Among Those Familiar With the Service) (N=146)





Overall Rating of Fee-Based Special Brush & Bulky Pick-Up Service – Three of four past-users of the special Brush & Bulky pick-up service rate it as "excellent" and none indicate a negative evaluation, resulting in a 4.6 average score on the "1-to-5" scale.

Table 5b Overall Rating of Fee-Based Special Brush & Bulky Pick-Up Service

(Among Those Who Have Used the Service)
(Avg=4.6)
(N=17)





Good Value for the Cost of Fee-Based Special Brush & Bulk Pick-Up — Consistent with their high service quality ratings, nearly all (16 of 17 or 94%) past-users of the special Brush & Bulky pick-up service feel the service was a good value for the cost.

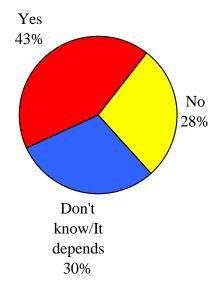
Table 5c Good Value for the Cost of Fee-Based
Special Brush & Bulky Pick-Up
(Among Those Who Have Used the Service)
(N=17)

Yes 94% No 6%



Possible Future Use of Fee-Based Special Brush & Bulky Pick-Up – Among residential customers unaware of the special Brush & Bulky pick-up service (64% of total customers), 43% indicate they might use it in the future. Future potential usage is higher among renters (64% versus 40% of homeowners), men, 18 to 54 year-olds and progressively "newer" residents at their current address.

Table 6 Possible Future Use of Fee-Based
Special Brush & Bulky Pick-Up
(Among Those Who Are Unaware of the Service)
(N=262)

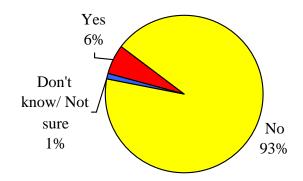




Use of Another Service Like the Fee-Based Special Brush & Bulky Pick-Up — Residential customers unaware of the special Brush & Bulky pick-up service (64% of the total sample) were also asked if they have ever used another service like it. As summarized in Table 6a, 6% say "yes" — typically higher income households (\$75,000+) who have lived at their current address for 11+ years.

Table 6a Use of Another Service Like the Fee-Based Special Brush & Bulky Pick-Up

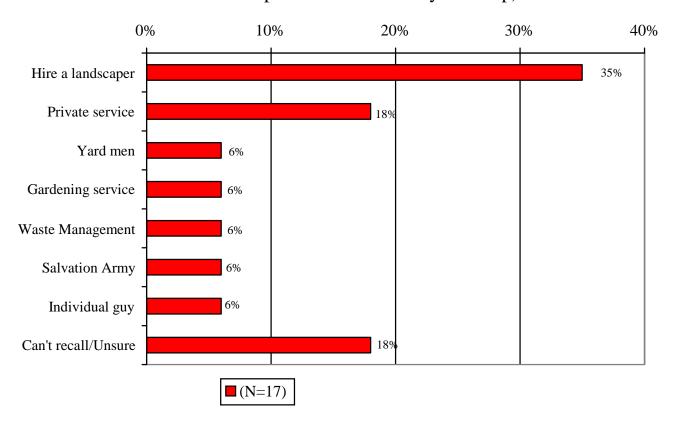
(Among Those Who Are Unaware of the Service) (N=262)





Other Pick-Up Service Used – When asked to specify the name of the pick-up service utilized that is similar to the special Brush & Bulky service, few identify a particular company or service. Instead, most simply say the services were provided by "a landscaper" or "private service." A few others don't recall the name of the service utilized. Only "Waste Management" and "the Salvation Army" are specifically identified by name among the 17 customers who recall using a Brush & Bulky-like pick-up service.

Table 6bOther Pick-Up Service Used
(Among Those Who Have Used a Service Similar to the Fee-Based Special Brush & Bulky Pick-Up)





One-Time Special Brush & Bulky Pick-Up Fee Elasticity of Support – The willingness to pay for one-time special Brush & Bulky pick-up service (among residential customers aware of the service or those unaware who might use it in the future) increases with progressively lower fee levels. At the \$100 per service fee level, 9% indicate potential usage. Overall support levels only increase to 14% when the fee is reduced to \$75. At \$55, support levels more than doubles to 36% – including a similar share of regular Brush & Bulky service users (36%) and non-users (33%). With respect to length of residency at current address, it is clear that the most long-term residents (11+ years) are *least* willing to pay a \$55 fee (30% versus 36% overall).

Based on these findings, it is apparent that the highest degree of willingness to pay for a one-time special Brush & Bulky pick-up service is at the \$55 fee level. However, this is an acceptable fee for only 30% of the entire sample. In other words, 70% have no interest in the service or would not be willing to pay a one-time fee of \$55.

Table 7 Willingness to Pay Various Amounts for a
One-Time Special Brush & Bulky Pick-Up
(Among Those Aware of the Special Service or

(Among Those Aware of the Special Service or Those Unaware Who Indicate Potential Usage)

	Sub-Sample (N=336)		Brusl Serv	egular n & Bulky vice User V=267)	Regular Brush & Bulky Service Non-User/ Unfamiliar (N=69)	
Fee Level	Yes, Would Pay Cumulative		Yes, Would Pay Cumulative		Yes, Would Pay Cumulative	
\$100	9%	9%	9%	9%	7%	7%
\$75	5%	14%	6%	15%	1%	8%
\$55	22%	36%	21%	36%	25%	33%

0-3 Year Residents at Current Address (N=74)		ent Address	4-10 Year Residents at Current Address (N=81)		11+ Year Residents at Current Address (N=181)	
	Yes, Y	Would Pay	Yes,	Would Pay	Yes, Would Pay	
Fee Level	%	Cumulative	%	Cumulative	%	Cumulative
\$100	8%	8%	9%	9%	9%	9%
\$75	1%	9%	9%	18%	4%	13%
\$55	30%	39%	25%	43%	17%	30%



Willingness to Separate Brush & Bulky Pick-Up Service Trash Materials Into Separate Piles – Among residential customers aware of the special Brush & Bulky pick-up service (or unaware of the special service but willing to use it) (82% of the total sample), fully 85% are willing to sort trash materials into three separate landscape waste, tires and "other" piles. This is the case regardless of home ownership status or type of residents – particularly among progressively newer residents at their current address. One of ten is unwilling to separate their Brush & Bulky items into piles, more often those 55 or older.

Table 8 Willingness to Separate Brush & Bulky Pick-Up Service Trash Materials Into Separate Piles (Among Those Aware of the Special Service or Those Unaware Who Indicate Potential Usage) (N=336)



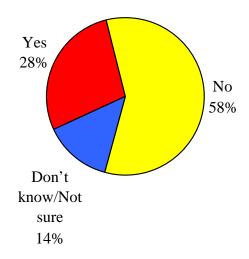


Consideration of Elimination of Regular Brush & Bulky Service and Fees and Having As-Needed Fee-Based Pick-Up Only – Among past-users or those unfamiliar with the regular Brush & Bulky service (77% of the total sample), six of ten would *not* consider eliminating their twice-a-year pick-up Brush & Bulky service (and reducing their monthly Environmental Services fee by \$2) in lieu of only pick-up on an as-needed basis for a fee. This is the case among both renters and homeowners, and regardless of length of residency at current address.

Among the rest, 28% are willing to consider going to an as-needed, fee-based Brush & Bulky service – more often renters, younger customers (18 to 34) and lower income households (under \$25,000). The balance (14%) are not sure.

Table 9 Consideration of Elimination of Regular
Brush & Bulky Service and Fees and
Having As-Needed Fee-Based Pick-Up Only

(Among Past-Users or Those Unfamiliar With the Brush & Bulky Service) (N=314)





Sufficiency of Door Hanger Notification of Brush & Bulky Pick-Up Service – Fully 93% of residential customers indicate that the current door hanger notification of Brush & Bulky pick-up service is sufficient. Only 5% say that it is not.

Table 10 Sufficiency of Door Hanger Notification of Brush & Bulky Service

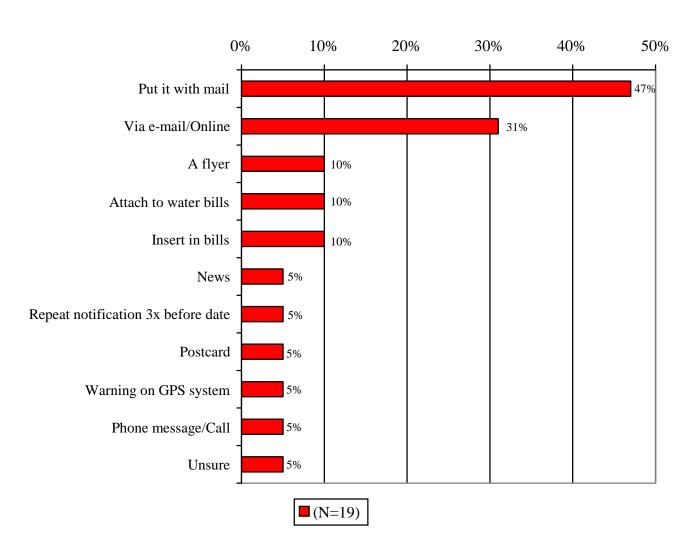




Suggested Notification Methods in Place of or Addition to Door Hangers – Among the few residential customers who think that a door hanger is not sufficient notification of Brush & Bulky pick-up (5% of the total sample), most suggest mail or an insert with a regular monthly bill ("post card," "better if it was in the mail," "insert in bills," "attach to some kind of bill, like the water bill"). Others recommend notification by e-mail or the Internet ("send a note via e-mail," "post it on the website"). Turn to page V7 in the Appendix for a listing of suggested notification methods.

Table 10a Suggested Notification Methods in Place
Of or Addition to Door Hangers

(Among Those Who Think Door Hangers Are Insufficient)

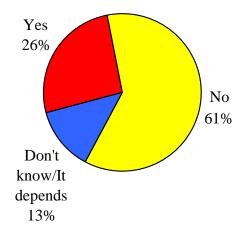




Consideration of Separate Barrel for Landscape or Yard Waste Collection for Additional Monthly Fee – One of four residential customers would consider a separate barrel for landscape or yard waste collection for an additional monthly fee. Another 13% are unsure or say "it depends." Those willing to consider a separate landscaping/yard waste barrel include renters, progressively younger customers and 10 or fewer year residents at their current address.

Six of ten are unwilling to consider a separate landscaping/yard waste barrel. This includes two-thirds of customers who have lived at their current address for 11+ years.

Table 11 Consideration of Separate Barrel for Landscape or Yard Waste Collection for Additional Monthly Fee





Separate Landscape/Yard Waste Barrel Collection Monthly Fee Elasticity of Support – Among those willing to consider a separate landscape/yard waste barrel (or say it depends) (39% of the total sample), three of ten indicate they would be willing to pay a \$15 monthly fee. Overall support increases by 68% to 52% (especially among progressively newer residents at their current address) when the monthly fee is reduced to \$10. An additional reduction to \$7.50 per month only increases support by 27% (to 66% overall) – more often regular Brush & Bulky service users (67%) and residents for 10 years or less at their current address.

Based on this analysis, among those willing to consider a separate landscape yard waste barrel, a majority would accept a \$10/month fee. And two-thirds of those who would consider a separate barrel would be willing to pay \$7.50 a month.

Table 11a Willingness to Pay Various Amounts Per Month for Separate Landscape/Yard Waste Barrel Collection

(Among Those Willing to Consider a Separate Barrel)

			Regular Brush &		Regular Brush &	
	Sub Sampla		Bulky Service		Bulky Service Non- User/Unfamiliar	
	Sub-Sample (N=160)		User (N=123)		(N=37)	
	Yes, Would Pay		Yes, Would Pay		Yes, Would Pay	
Fee Level	%	Cumulative	%	Cumulative	%	Cumulative
\$15	31%	31%	32%	32%	27%	27%
\$10	21%	52%	20%	52%	27%	54%
\$7.50	14%	66%	15%	67%	8%	62%

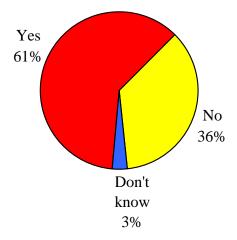
	at Curr	ar Residents ent Address N=44)	at Curr	ear Residents ent Address N=48)	11+ Year Residents at Current Address (N=68)	
	Yes, Would Pay		Yes, Y	Would Pay	Yes, Would Pay	
Fee Level	%	Cumulative	%	Cumulative	%	Cumulative
\$15	39%	39%	23%	23%	31%	31%
\$10	18%	57%	29%	52%	18%	49%
\$7.50	16%	73%	21%	73%	7%	56%



Household Hazardous Waste Program Evaluations

Awareness of Household Hazardous Waste Program – Six of ten residential customers indicate that they are aware of the Household Hazardous Waste Program (61%) – regardless of overall ESD rating. Users of the regular Brush & Bulky service are more apt to be aware of the Household Hazardous Waste Program, as are those who own their home, who reside in single-family residences and who have lived in their current residence for 4 or more years.

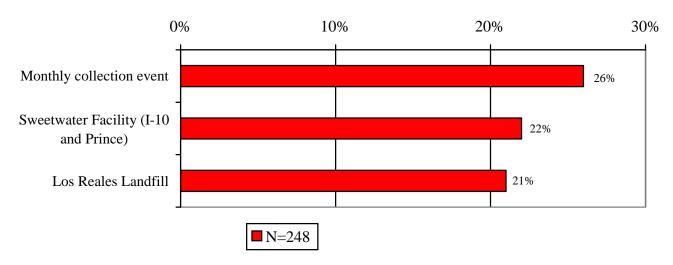
Table 12 Awareness of Household Hazardous Waste Program





Locations Used to Drop Off Household Hazardous Waste – Among those familiar with the Household Hazardous Waste Program (61% of the total sample), one of four have dropped off items at a monthly collection event (26%), while two of ten have dropped off household hazardous waste at either the Sweetwater Facility (22%) or Los Reales Landfill (21%). Brush & Bulky service users, residents of single-family homes and those who have lived at their current address for 4+ years are more apt to have dropped off household hazardous waste at any of these three locations. Renters are more apt to have dropped off household hazardous waste at a monthly collection event rather than at one of the facilities.

Table 12a Locations Used to Drop Off Household Hazardous Waste (Among Those Aware of the Program)





Household Hazardous Waste Scheduled Pick-Up Fee Elasticity of Support – Among residential customers, 28% are willing to pay a \$25 fee for a scheduled pick-up of household hazardous waste at their home by the ESD. If the pick-up fee is reduced to \$15, the willingness to pay increases to 40% – including one-half of residents at their current address for ten or fewer years (versus just 32% of 11+ year residents). Willingness to pay increases by 28% to 51% overall if the fee is reduced to \$10. This includes the majority of 4-to-10 (55%) and 0-to-3 year (64%) residents (compared to only 42% of 11+ year residents).

These findings suggest a recommended fee level of \$10 for scheduled at-home pick-up of household hazardous waste.

Table 13 Willingness to Pay Various Amounts for a Scheduled Pick-Up of Household Hazardous Waste

		ıl Sample N=408)	at Current Address (N=90)		4-10 Year Residents at Current Address (N=100)		11+ Year Residents at Current Address (N=218)	
	Yes, V	Would Pay	Yes, Would Pay		Yes, Would Pay		Yes, Would Pay	
Fee Level	%	Cumulative	%	% Cumulative		Cumulative	%	Cumulative
\$25	28%	28%	38%	38%	33%	33%	22%	22%
\$15	12%	40%	12%	50%	15%	48%	10%	32%
\$10	11%	51%	14%	64%	7%	55%	10%	42%



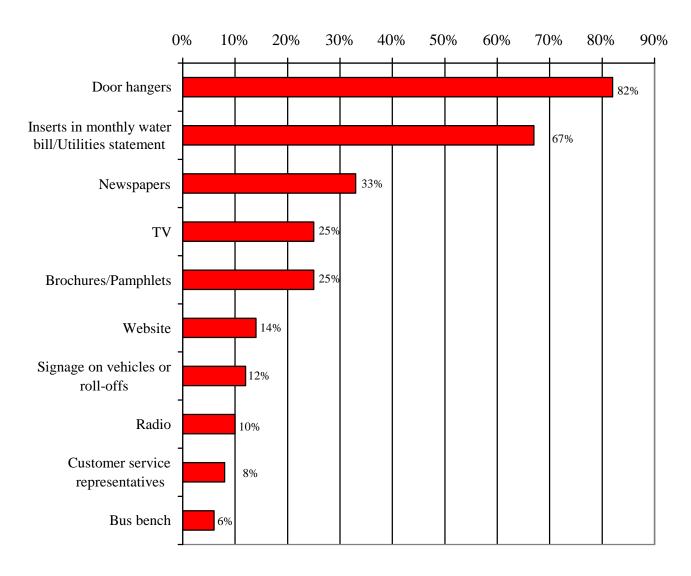
ESD Communication and Website Evaluations

Communication Resources Used for Information About Environmental Services – All residential customers were asked by which means they receive information about Environmental Services. As reflected in Table 14, more than eight of ten have encountered ESD door hangers (82%), while two-thirds have received inserts in their monthly water bill or utilities statement (67%). Brush & Bulky service users, homeowners, customers in single-family residences and those who have lived at their current address for 4+ years are more apt to recall a door hanger, while water/utilities bill inserts are more apt to be recalled by renters, residents of non-single-family homes and those at their current address for 3 years or less.

In lesser numbers, some residential customers mention seeing ESD information in newspapers (33%), on television (25%) or in brochures or pamphlets (25%). Brush & Bulky service users are more apt to recall each of these three communication sources. Homeowners tend to have higher recall of newspaper information, while brochures/pamphlets have higher recall among renters.



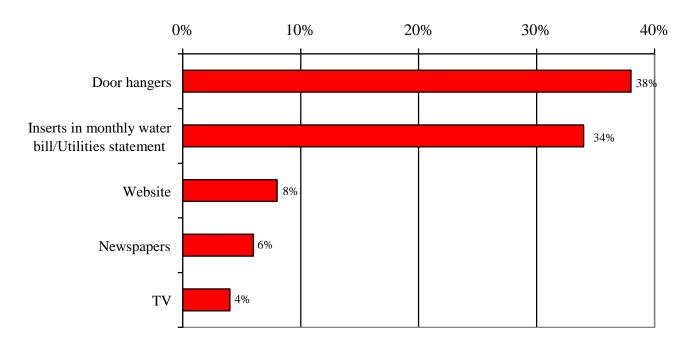
Table 14 Communication Resources Used for Information About Environmental Services





Best Way to Provide Information About Environmental Services – When asked which of these information sources was the *best* way to provide ESD information, door hangers (38%) and inserts in the monthly water bill or utilities statement (34%) are preferred nearly equally. Fewer prefer websites (8%), newspapers (6%) or television (4%). Brush & Bulky service users, homeowners; those in single-family residences and customers who have lived at their current address for progressively more years are more apt to favor door hangers as the best means of communication. Monthly water bill/utilities statement inserts are the top choice of renters, those at their current residence for 3 or fewer years, non-single-family home residents and current non-users of the regular Brush & Bulky service.

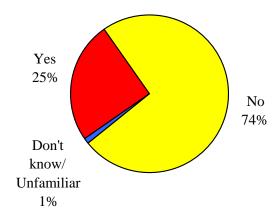
Table 15 Best Way to Provide Information
About Environmental Services





Use of Environmental Services Website – Among the total sample, one of four indicate that they have used the Environmental Services website (25%), with little difference based on home ownership. Customers living in single family residences and who have lived at their current address for 4 to 10 years are more apt to have used the website, as are those with household incomes between \$50,000 and \$99,999 and residential customers under 55 years of age (especially those 35 to 44).

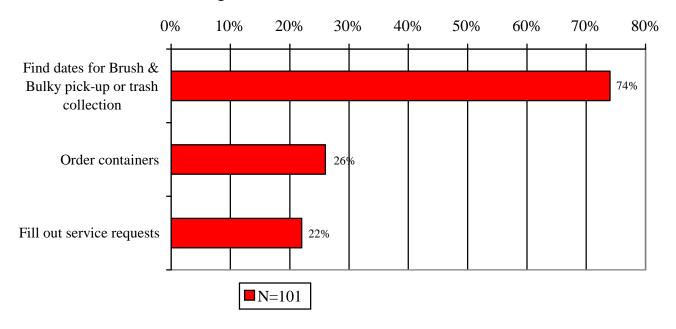
Table 16 Use of Environmental Services Website





Reasons for Using Environmental Services Website – Among ESD website users (25% of the total sample), three of four have utilized the site to find dates for Brush & Bulky pick-up or trash collection (74%). These tend to be regular Brush & Bulky service users, those with progressively higher ratings of ESD, homeowners and those in single family residences, as well as progressively longer-term residents at the same address. One of four say they used the website to order containers (26%), while 22% indicate they have filled out service requests on the website. Container orders are more common among those who have lived at their current address for 10 years or less, while the newest residents of their current address (less than three years) are more apt to have filled out online service requests.

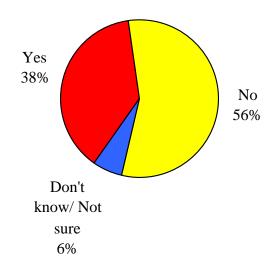
Table 16a Reasons for Using Environmental Services Website(Among Those Who Have Used the Website)





Potential Sign-Up for Environmental Services Informational E-Mails – When asked if they would sign up for a service if Environmental Services offered a way to receive information via e-mail, nearly four of ten residential customers indicated that they would (38%). This includes an even greater share of renters (47%) and residents at their current address for 3 years or less (51%), as well as residential customers under 55 years of age (48%-55%).

Table 17 Potential Sign-Up for Environmental Services Informational E-Mails

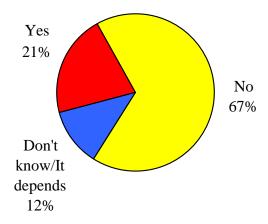




Temporary Service Stop Evaluations

Potential Use of Temporary Service Stop Program – Residential customers were asked if they would consider using a program "offering existing customers a way to temporarily halt and then resume their service while away from home for a long period of time" with a restart fee to redeliver the barrels upon their return. As reflected in Table 18, two of ten indicate they would consider such a service (21%). Another 12% say "it depends." Renters, progressively newer residents at their current address and the youngest customers (18 to 34) are most likely to consider such a service.

 Table 18
 Potential Use of Temporary Service Stop Program





Temporary Service Stop Program Fee Elasticity of Support – Among those willing to consider the service or who say it depends (33% of the total sample), 16% are willing to pay a \$50 fee for a temporary service stop program. If the fee is reduced to \$35, the willingness to pay doubles to 34%. At the \$25 fee level, support increases to 63%. It is clear that progressively newer residents at their current address are more willing to support a temporary service stop program – regardless of the fee charged.

Based on these findings, a fee of \$25 is suggested, for the widest degree of support among those interested in the service.

Table 18a Willingness to Use Temporary Service Stop Program at Various Fee Levels

(Among Those Willing to Consider the Service)

		o-Sample N=133)	at Current Address (N=42)		4-10 Year Residents at Current Address (N=36)		11+ Year Residents at Current Address (N=55)	
	Yes, V	Would Pay	Yes, Would Pay		Yes, Would Pay		Yes, Would Pay	
Fee Level	%	Cumulative	%	% Cumulative		Cumulative	%	Cumulative
\$50	16%	16%	26%	26%	22%	22%	5%	5%
\$35	18%	34%	26%	52%	14%	36%	14%	19%
\$25	29%	63%	21%	22,0		64%	34%	53%



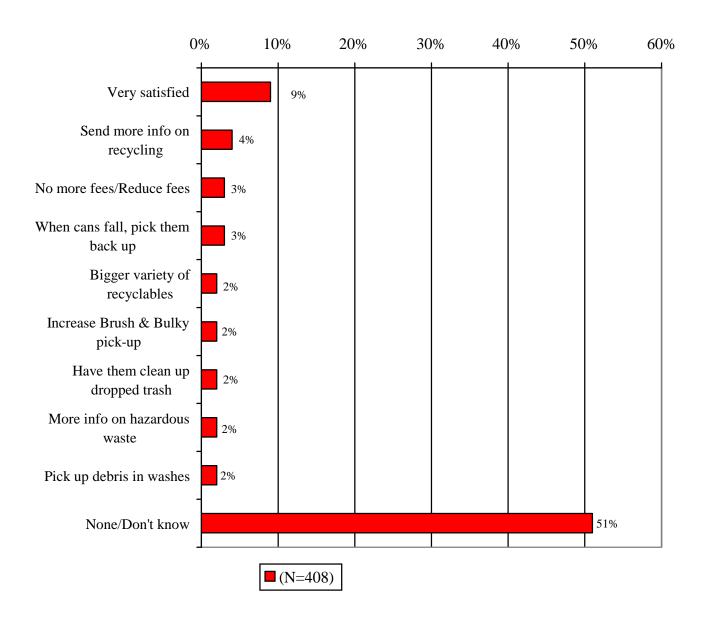
Suggestions for ESD

Additional Suggestions, Recommendations or Comments for ESD – As summarized in Table 19 (and on pages V8-V16 in the Appendix), six of ten residential customers offer no suggestions or comments (51%) or indicate they are "very pleased with the service" they currently receive from ESD (9%). The remaining four of ten offer a variety of suggestions. Some want the ESD to "get people more informed about recycling" ("somehow to reach people that recycling is a vital part of our trash pick-up," "tell everyone what is recyclable and where") and "to increase recycling, be able to recycle more items." Others "want to know more about hazardous waste" ("Hazardous Waste Program, they should be more serious about," "Household Hazardous Waste Program is excellent...really want to see this program more advertised"). A few also request more Brush & Bulky pick-ups ("increase Brush & Bulky pick-up to three times per year," "think the Brush & Bulky service should be done at least every four months") or "would like them to take on the debris in the washes."

In terms of specific complaints, some say that "when the drivers place the cans back, put the lids back on because they fall over and we have to go out and pick them up" ("they just plot the container down and it sometimes falls over...the guy should get out and put it back up instead of sending someone else later to do it") or mention that "sometimes they leave trash on the ground and I have to pick it up" ("please pick up the garbage cans when they fall over," "I notice stuff in the street because it misses the truck"). Others think "they're overcharging us for things we used to get and are supposedly being paid for by our taxes" ("stop raising prices," "lower the rates," "don't think they should charge fees").



Table 19 Additional Suggestions, Recommendations or Comments for ESD





ENVIRONMENTAL SERVICES DEPARTMENT (ESD) AWARENESS, USAGE, CUSTOMER SATISFACTION AND PREFERENCES STUDY

(March, 2011)

Appendix

Survey Methodology and Sample Selection

This study consists of a 408-person, randomly-selected and statistically-projectable sample of residential customers of the City of Tucson's Environmental Services Department (ESD). All respondents were adult (age 18 or older) heads of household. Surveys were equally distributed among the City's six Wards.

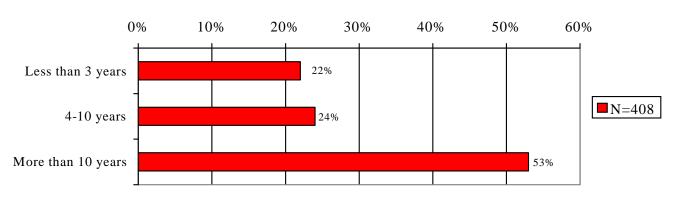
All interviews were conducted by telephone during early March 2011. The fielding was conducted using a computer-assisted predictive dialing system with a client-supplied database of base sample residential ESD customers. Respondents included in this survey were selected through a random sampling procedure that allows equal probability of selection from the database. At least three attempts were made to reach each randomly selected household before replacing it with another randomly selected household. There was only one interview per household. Surveys were conducted in English or Spanish, as preferred by the respondent. A total of 11 surveys were conducted in Spanish by a bilingual FMR interviewer. The telephone interviews lasted 12 minutes on average. Neither the interviewer nor the interviewee had any knowledge of the study sponsor. All interviews were conducted and validated by the FMR field staff.



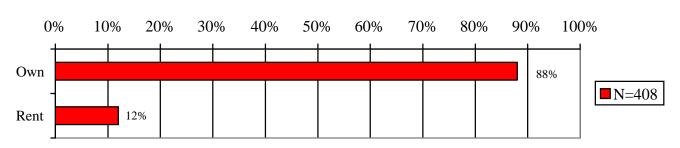
Respondent Characteristics

The following tables reflect the characteristics of the final completed sample of residential Environmental Services Department customers.

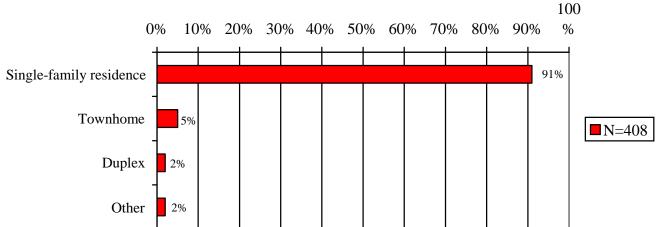
<u>Table A-1</u> <u>Length of Residence at Current Address</u>



<u>Table A-2</u> <u>Ownership/Rental of Home</u>

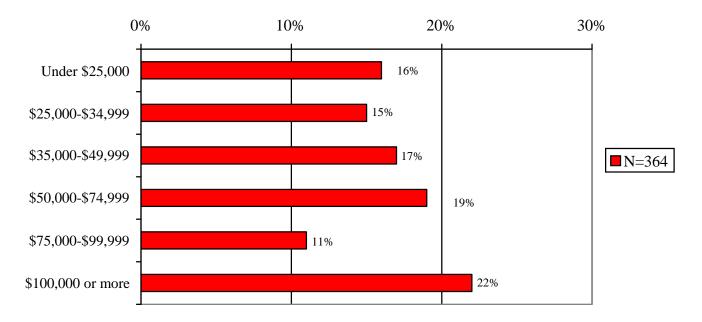


<u>Table A-3</u> <u>Type of Home</u>





<u>Table A-4</u> <u>Household Income of Respondents</u>



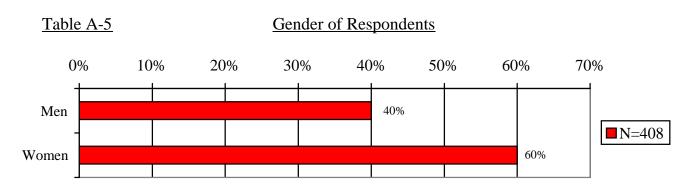




Table A-6

Age of Respondents

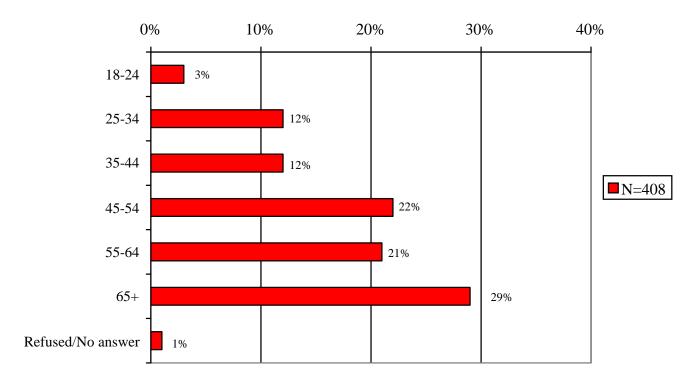


Table A-7 Language of Survey 0% 10% 30% 50% 60% 70% 80% 90% 100% 20% 40% English 97% ■ N=408 Spanish 3%



Statistical Reliability

The statistics in this report are subject to a degree of variation that is determined by sample (or sub-sample) size. All research data are subject to a certain amount of variation for this reason. This does not mean that the figures represented in the various tables are wrong. It means that each percentage represents a possible "range" of response. This is because the random sampling process, as well as human behavior itself, can never be perfect. For this sample, N=400 (rounded), the statistical variation is ±4.9% under the most extreme circumstances – with a 95% confidence level. That is, when the percentages shown in the tables are near 50% (the most conservative situation), the actual behavior or attitude may range from 45.1% to 54.9%. The 95% confidence level means that if the survey were repeated 100 times, in 95 cases the same range of response would result. Those percentages that occur at either extreme (for example, 10% or 90%) are subject to a smaller degree of statistical fluctuation (in this case, ±2.9%).

Sub-samples, such as home ownership status or age groups, have a higher degree of statistical fluctuation due to the smaller number of respondents in those groupings.

Confidence Intervals for a Given Percent (at the 95% confidence level)

N		Reported Percentage					
(Base for %)	10 or 90%	20 or 80%	30 or 70%	40 or 60%	50%		
400	2.9%	3.9%	4.5%	4.8%	4.9%		
300	3.3%	4.5%	5.1%	5.5%	5.7%		
200	4.2%	5.5%	6.4%	6.8%	6.9%		
100	5.9%	7.8%	9.0%	9.6%	9.8%		
50	8.3%	11.1%	12.7%	13.6%	13.9%		
25	11.8%	15.7%	18.0%	19.2%	19.6%		

Example:

If the table shows that 20% of all respondents (when N=400) have a positive or negative attitude about a question category, the chances are 95 out of 100 that the true value is $20\% \pm 3.9$ percentage points; that is, the range of response would be 16.1% to 23.9%.



Significance of Difference Between Percentages (at the 95% confidence level)

Average of the	Reported Percentage								
Bases of Percentages Being Compared	10 or 90%	20 or 80%	30 or 70%	40 or 60%	50%				
250	5.2%	7.1%	8.1%	8.6%	8.8%				
200	5.9%	7.8%	8.9%	9.6%	9.8%				
150	6.8%	9.1%	10.3%	11.0%	11.3%				
100	8.3%	11.0%	12.7%	13.6%	13.9%				
50	11.7%	15.7%	18.0%	19.2%	19.7%				
25	16.7%	22.2%	25.5%	27.2%	27.7%				

Example:

If a table indicates that 35% of homeowners have a positive attitude toward a category of response, and that 26% of renters have the same attitude, the following procedure should be used to determine if this attitude is due to chance:

The average base is 200 (rounded) for the reported percentages (359+49)/2=204. The average of the percentages is 30.0% - (35+26)/2=30.5%. The difference between the percentages is 9%. Since 9% is greater than 8.9% (the figure in the table for this base and this percentage), the chances are 95 out of 100 that the attitude is significantly different between survey respondents who own or rent their current residence.



Display A-1

Final Disposition of Dials

I.	Non-Interview Attempts (Including disconnected, blocked, no answer, busy, business)	8,540 3,328
	Refusals	552
	"Call back"/Answering Machine	4,660
II.	Live Contacts (% of)	
	Screening Terminates A. Language	69 (13.3%)
	B. Midway Terminates	41 (7.9%)
	Total Terminates	110
	Completed Interviews	408 (78.8%)
	Total Live Contacts	518
III.	Other Rates	
	A. Refusal Rate	54%
	B. Contact Success Rate	9.2%
	C. Interview Success Rate (as % of Live Contacts	
	and Refusals)	38.1%
IV.	Average Survey Length	12 minutes



ENVIRONMENTAL SERVICES DEPARTMENT (ESD) AWARENESS, USAGE, CUSTOMER SATISFACTION AND PREFERENCES STUDY

(March, 2011)

COPY OF SURVEY INSTRUMENT



FMR Associates, Inc. 6045 E. Grant Road Tucson, Arizona 85712 Job No. 309169-112
Final Design
March, 2011
Project No. 9 6 ______

ENVIRONMENTAL SERVICES DEPARTMENT USER SURVEY

- Screening Form -

	bereening I om		
TIME INTERVIEW STARTED:	ENDED: _	DATE:	_
INTERVIEWER NAME:	QU	JESTIONNAIRE NO.:	
TELEPHONE:	<u>WARD</u> :	Ward 1	(1-4)
Hello, my name is I am calling the are conducting a brief survey about the various Department. We are not selling or soliciting and used for research purposes only. A. For this survey, we need to speak with the	services provi nything. All a	rch, a nationwide public opinion compaded by City of Tucson Environmental Sensers are completely confidential and	Services will be
or older. Are you that person? Yes(C No(A	<u> SK TO SPEAI</u>	K TO THE MALE OR FEMALE ISEHOLD, RETURN	
INTERVIEWER: IF YOU OR RESPONDE ASK: "Would you feel most comfortable if the	ENT HAS TR		OTHER,
Spanish English -OR- Does it make no difference	.2 (<u>SKIP TO Q</u>	<u>.1</u>)	
INSTRUCTIONS: IF RESPONDENT PRIEITHER GO TO FORM "B" (Spanish Lab BILINGUAL INTERVIEWER TO RECALL	nguage Survey		
Best time to reschedule Respondent's first name			

Copyright FMR Associates, Inc., 2011

Rev: 3/1/11 09:45

FMR Associates, Inc. 6045 E. Grant Road Tucson, Arizona 85712

Job No. 309169-112 Final Design March, 2011

ENVIRONMENTAL SERVICES DEPARTMENT USER SURVEY

- Main Questionnaire -

1. I would like to start by asking you a few questions about the City of Tucson's Environmental Services Department, the City department that picks up your trash and recycling. In your opinion, please tell me how good of a job the City's Environmental Services Department is doing overall, using a scale of "1-to-5" where a "5" means an "excellent job" and a "1" means a "very poor job." You can give me any number between "1" and "5."

					No opinion/
Excellent	Good	<u>Fair</u>	<u>Poor</u>	Very Poor	Don't know
5	4	3	2	1	0
(17)					

2. Now I would like you to rate the City's Environmental Services Department on individual services and programs. As I read each service or program, please rate how good of a job the Environmental Services Department is doing on each with the same "1-to-5" scale, where a "5" means an "excellent job" and a "1" means a "very poor job." You can give me any number between "1" and "5." (READ ITEMS IN RANDOM ORDER)

	Excellent	Good	<u>Fair</u>	<u>Poor</u>	<u>Very Poor</u>	Unfamili Don't kn	
() Trash collection	5	4	3	2	1	0	(18)
() Recyclables collection in the blue barr	el 5	4	3	2	1	0	(19)
() Brush & Bulky collection	5	4	3	2	1	0	(20)
() Household Hazardous Waste Program	5	4	3	2	1	0	(21)
() Providing customer service on the telephone	5	4	3	2	1	0	(22)

OWN/ RENT HOMI		VFI	RBATIM				
HOMI	E RESIDENCE	V 121	XDATIVI				
3.	Now I'd like s Environmental S pick-up service. NOT READ)	ervices Dep	artment. F	First, I'd li	ke to ask	you about the	Brush & Bulky
		No	't know/Ur		2 (<u>SKIP</u>	- /	3)
3a.	How many times	s per year do	you use th	e Brush &	Bulky ser	vice? (DO NO	OT READ)
		Twie Thre	eee or moresure/Don't		2 3		
3b. "excell and "5.	Please rate the B ent job" and a "1"						
		Excellent 5 (25)	Good 4	<u>Fair</u> 3	Poor 2	Very Poor 1	No opinion/ <u>Don't know</u> 0
3c.	Is your Brush &	Bulky pick-	up in the al	ley or at th	ne curb? (DO NOT REA	AD)
		Curl			2 (<u>S</u>	SK Q.3d) KIP TO Q.5) KIP TO Q.5)	(26)
3d.	Would you prefe	r curb pick-	up? (<u>DO N</u>	OT REAL	<u>)</u>)		
		No			2 (<u>ASK</u>	V SKIP TO Q Q.3e) V SKIP TO Q	
3e.	Why not? Why c curb? (PROBE)	lo you prefe	r Brush &	Bulky pick	x-up servic	e in the alley	instead of at the

Table 19: Additional Suggestions, Recommendations or Comments for ESD

OWN/ TYPE			
RENT OF			
HOME RESIDENCE	VERBATIM		

No special reason......97

(NOW SKIP TO Q.5)

OWN/ RENT HOME			BATIM				
4.	Why don't you use the	Brush	& Bulky p	oick-up ser	vice? (<u>PR</u> 0	<u>OBE</u>)	
	Are you aware that yo schedule a special Brus					_	-
		No		1 (<u>A</u> 2 (<u>SI</u> 3 (<u>SI</u>	KIP TO Q.	<u>.6</u>)	
	Have you used the sp <u>READ</u>)	ecial B	Brush & B	Bulky pick	-up for an	additional fe	ee? (<u>DO NO</u>
		No		t sure	2 (<u>SKIP</u>	- /))
	Please rate the special "5" means an "exceller number between "1" ar	nt job"		-			
	<u>Excel</u> 5 (30		Good 4	Fair 3	Poor 2	Very Poor 1	No opinion/ <u>Don't know</u> 0
	Do you feel the special cost? (DO NOT READ		& Bulky 1	pick-up sei	vice provi	ided was a goo	od value for the
		No			2 (<u>NOW</u>	SKIP TO Q. SKIP TO Q. SKIP TO Q.	<u>7</u>)
	Now that you know ab might use it in the future		_		ulky pick-	up service, do	you think you
		No		lepends	2		

OWN/ RENT	TYPE OF	
	RESIDENCE	VERBATIM
6a.	Have you used ano	ther pick-up service like this? (<u>DO NOT READ</u>)
		Yes1 (<u>ASK Q.6b</u>)
		No2 (<u>SKIP TO Q.7 INSTRUCTIONS</u>)
		Day 24 In any Nick arms 2 (CIVID TO O 7 INCTRICATIONS)
		Don't know/Not sure3 (SKIP TO Q.7 INSTRUCTIONS)

OWN/ RENT HOME	TYPE OF E RESIDENCE	VERBATIM
6b.	What service did y	ou use? (PROBE FOR SPECIFIC COMPANY NAME)
		Can't recall/Not sure98 (34-35)
7.	SKIP TO INSTRU for a one-time spec	ON'T KNOW/IT DEPENDS [3] IN Q.6, ASK Q.7; IF NO [2] IN Q.6, CTIONS BEFORE Q.9:) Considering what would be a reasonable fee cial scheduled Brush & Bulky pick-up by the Environmental Services I it be worth \$100 to you? (DO NOT READ)
		Yes
7a.	Would it be worth	\$75 to you? (DO NOT READ)
		Yes
7b.	Would it be worth	\$55 to you? (DO NOT READ)
		Yes
	three different piles	ling to separate Brush & Bulky pick-up service trash materials into s – landscape waste, tires and all other items? (<u>IF ASKED</u> : Separating materials to be recycled and reused.) (<u>DO NOT READ</u>)
		Yes
9.	Q.3, SKIP TO Q. Brush & Bulky pic \$2 (or \$24 annuall	OON'T KNOW/UNFAMILIAR [3] IN Q.3, ASK Q.9; IF NO [2] IN 10:) If Environmental Services eliminated the current twice a year k-up service and reduced your monthly Environmental Services fee by y), and only offered Brush & Bulky pick-up on as-needed basis for a something you would consider? (DO NOT READ)

OWN/ TYPE RENT OF HOME RESIDENCE	VERBATIM
	Yes1
	No2
	Don't know/Not sure3 (40)

OWN/ RENT HOME	TYPE OF RESIDENCE	VERBATIM
		mental Services Department notifies you of your Brush & Bulkynger. Is this sufficient notification? (<u>DO NOT READ</u>)
		Yes
	What other way of not (<u>PROBE</u>)	ification would work better, or could supplement the door hanger?
		None/No suggestion99
(ices were to offer a separate barrel for landscape or yard waste and basis for an additional monthly fee, would that be something you NOT READ)
		Yes
•	_	ald be a reasonable fee for regular pick-up of landscape or yard the Environmental Services Department, would it be worth \$15 ONOT READ)
		Yes
11b.	Would it be worth \$10	per month to you? (<u>DO NOT READ</u>)
		Yes
11c.	Would it be worth \$7.5	60 per month to you? (<u>DO NOT READ</u>)
		Yes1

OWN/ TYPE	
RENT OF	
HOME RESIDENCE	VERBATIM
	No2
	Don't know

Table 19: Additional Suggestions, Recommendations or Comments for ESD

	radic 17. Additiona	i buggestions, recomme	iidations	or co	Jimients for LS	D
OWN/ RENT		VERBATIM				
HOMI	E RESIDENCE	V ERDA I IVI				
12.	_	a some questions about to some questions about to some (DO NOT REA		ehold	Hazardous Was	ste Program.
		Yes 1 No			PARAGRAPH	BEFORE
<u>Q.13</u>)			`			
<u>Q.13</u>)	(46)	Don't know3	(SKIP	10	PARAGRAPH	BEFORE
12a.	As I read the following hazard waste there. (R)	g locations, please tell m EAD)	e if you	have	ever dropped of	f household
	Sweetwater faci	lity (I-10 and Prince)	Yes 1	<u>N</u>	<u>o</u> (47)	
	Los Reales Land	dfill	1	2	2 (48)	
	At a monthly co	ollection event	1	2	2 (49)	
	(NOW ASK	Q.13 – DO NOT READ	INTRO	PAR/	AGRAPH)	
Enviro	nmental Services Depar	W [3] IN Q.12, SAY:) Hotement service, where 909 Items collected include p	% of all	house	hold hazardous	waste that it
13.	<u> </u>	ald be a reasonable fee ar home by the Environ ONOT READ)				
		Yes No Don't know/Not sure	2 (<u>A</u>	SK Ç	<u>0.13a</u>)	
13a.	Would it be worth \$15	to you? (DO NOT REA	<u>D</u>)			
		Yes No Don't know/Not sure	2 (<u>A</u>	SK Ç	<u>0.13b</u>)	

13b.

Would it be worth \$10 to you? (DO NOT READ)

OWN/ TYPE RENT OF		
HOME RESIDENCE	VERBATIM	
	Yes1	
	No2	
	Don't know	

Table 19: Additional Suggestions, Recommendations or Comments for ESD

OWN/	TYPE	
RENT	OF	
HOME 3	RESIDENCE	VERBATIM

-OR-

Now I have some questions about the various ways that Environmental Services communicates with City residents. To begin, I am going to read you a list of information sources. As I read each item, simply tell me if you get information about Environmental Services from.... (READ) (MULTIPLE MENTION)

Inserts in your monthly water bill or utilities statement	.01	
Door hangers	.02	
Brochures and pamphlets	.03	
A bus shelter	.04	
Signage on vehicles or roll-offs	.05	
A bus bench	.06	
Newspapers	. 07	
TV	.08	
Radio	.09	
Customer service representatives	. 10	
A website	.11	
Facebook	. 12	
Twitter	. 13	(53-62)

15. Which of the information sources I just read, if any, is the <u>best</u> way to provide you with information about Environmental Services? (<u>RE-READ ONLY IF NECESSARY</u>)

Inserts in your monthly water bill or utilities statement.	01	
Door hangers	02	
Brochures and pamphlets		
A bus shelter		
Signage on vehicles or roll-offs		
A bus bench		
Newspapers	07	
TV		
Radio	09	
Customer service representatives	10	
A website		
Facebook	12	
Twitter	13	
Other (specify)	98	
None of these/Not sure	99	(63-64)

Table 19: Additional Suggestions, Recommendations or Comments for ESD

OWN/ RENT <u>HOMI</u>	TYPE OF E RESIDENCE	VERBATIM			
16.	Do you use the Environ	nmental Services websit	e? (<u>DO N</u>	OT REA	<u>D</u>)
		Yes No Don't know/Unfamilia	2 (<u>SI</u>	<u>(IP TO (</u>	<u>Q.17</u>)
16a.		ng items, tell me if it READ IN RANDOM C		ing you	use the Environmental
			Yes	<u>No</u>	
	•	ates for Brush & Bulky ash collection	1	2	(66)
	() Fill out service	requests	1	2	(67)
	() Order container	rs	1	2	(68)
		ices offered a way to that service? (DO NOT		ormation	from them via e-mail,
		Yes No Don't know/Not sure	2	59)	
	halt and then resume that as an extended vacation would pick-up your tractory you when return. The are away; however, the	neir service while away on or for part-time To ash and recycling barrel There would be no mon- ere would be a restart for conmental Services offer	from home acson residus before you thly Environate the to delive	e for a lordents. I lou leave onmental er the bar	rs a way to temporarily ng period of time – such Environmental Services town; and deliver them Services fee while you rels to your home upon m, would you consider
		Yes No Don't know/It depend	2 (<u>SF</u>	CIP TO C	<u>2.19</u>)

Table 19: Additional Suggestions, Recommendations or Comments for ESD

HOME	RESIDENCE	VERBATIM	
RENT	OF		
OWN/	TYPE		

18a. Considering what would be a reasonable fee for Environmental Services to deliver barrels to your home and restart your service when you return home, would it be worth \$50 to you? (DO NOT READ)

OWN/ RENT	TYPE OF	
<u>HOME</u>	E RESIDENCE	VERBATIM
18b.	Would it be worth \$35	to you? (DO NOT READ)
		Yes
18c.	Would it be worth \$25	to you? (DO NOT READ)
		Yes
		suggestions, recommendations or comments you have for the es Department? (PROBE)
Finally	we would like to ge	None/No suggestion99 et some additional information about you that will help us to better
underst	and your opinions. There your identity will r	his information will be used for classification purposes only, and as a emain anonymous and all of your responses will remain completely
C-1.	Gender (DO NOT AS	<u>K</u>):
		Male
C-2.	How long have you l	ived at your current address?
		years (75-77) (FILL-IN)
C-3.	Please stop me when	I read the age category in which you belong. Are you(<u>READ</u>)
	2:	8 to 24

Table 19: Additional Suggestions, Recommendations or Comments for ESD

OWN/	TYPE		
RENT	OF		
HOME	RESIDENCE	VERBATIM	
		45 to 544	
		55 to 645	
	-OR-	65 or older6	
(<u>DO</u>	NOT READ)	Refused/No answer0	(78)

OWN/ RENT <u>HOME</u>	TYPE OF RESIDENCE	VERBATIM
C-4.	Do you own or re	nt the place where you live? (DO NOT READ)
		Own1 Rent
C-5.	What type of hom	te do you rent or own? Is it a(<u>READ</u>)
	-OR	Single-family residence 1 Duplex 2 Tri-plex 3 Apartment 4 Townhome 5
	(DO NOT READ	Other6
	(DO NOT READ) Refused/No answer (80)
ŀ		owing categories, please tell me in which group your total annual falls. We are not interested in your <u>exact</u> income, just your income <u>CATEGORIES</u>)
	-OR-	Under \$25,000 1 Between \$25,000 and \$34,999 2 Between \$35,000 and \$49,999 3 Between \$50,000 and \$74,999 4 Between \$75,000 and \$99,999 5 \$100,000 or more 6
(<u>DO 1</u>	NOT READ)	Refused/No answer 0 (81)
WANTS		NDENT FOR HIS/HER TIME AND SAY: "IN CASE THE OFFICE WORK, MAY I HAVE YOUR FIRST NAME AND ZIP CODE OF 5?"
RESPO	NDENT'S NAME	Zip Code: (82-
	* * * (REM	EMBER TO VERIFY RESPONDENT'S PHONE NUMBER) * * *
FOR OF	FFICE USE ONLY	-

OWN/ TYPE RENT OF			
HOME RESIDENCE	VERBATIM		
Validation Questions Q Q			
Q Q			